

Undervisningsportfolio

1. Undervisnings-CV: Oversigt over undervisnings- og vejledningsopgaver med angivelse af fagområder, omfang, niveau (BA, kandidat, EVU, Ph.d) samt evt. censoropgaver.

My teaching has been devoted to three M.Sc. specializations – Indoor Environmental Engineering (B-study board), Building Energy Design (B-study board) and Architecture & Design (A-study board).

I have mainly been teaching at the **M.Sc. specialization in Indoor Environmental Engineering**, and supervisor for a number of thesis students at the 3rd and 4th semester. At the specialization, I have been teaching subjects like thermal comfort and indoor air quality, ventilation technology, industrial exhaust, convective flows and contaminant distribution in ventilated rooms, design of energy efficient buildings, analysis of thermal systems, modeling and design of passive energy systems in buildings and modeling and design of natural and hybrid ventilation.

At the specialization, **M.Sc. specialization in Building Energy Design**, I have been teaching at the course modeling and design of natural and hybrid ventilation and integrated building design. I have been supervisor for a number of thesis students at the 4th semester.

I have been teaching at the **M.Sc. specialization in Architecture & Design**, and also supervisor for a number of thesis students at the 3rd and 4th semester. At the specialization, I have been teaching subjects like thermal comfort and indoor air quality, integrated design of energy efficient buildings, modeling and design of passive energy systems in buildings and modeling and design of natural and hybrid ventilation.

2. Studieadministration: Oversigt over studieadministrative opgaver, eksempelvis medlem af studienævn, studieleder, semesterkoordinator, fagkoordinator, akkreditering m.v.

2004 – 2008: member of the A – study board. 2006 – 2009, 2012 - 2016, 2017-: member of the B-study board. 1999 – 2007: coordinator of the 2nd semester of the M.Sc. specialization in Indoor Environmental Engineering. 2000 – 2005: coordinator of the 2nd semester of the M.Sc. specialization in Architecture & Design.

3. Universitetspædagogiske kvalifikationsforløb: Oversigt over gennemførte universitetspædagogiske kursusforløb, PBL-kurser, workshops, udviklingsprojekter, kollegial supervision o.l.

4. Anden form for kvalificering: Konferencedeltagelse, debatindlæg, oplæg m.v. i relation til uddannelse, "Undervisningens dag", o.l.

5. Undervisningsudviklingsforløb og undervisningsmateriale: Oversigt over medvirken til udvikling af nye moduler, undervisningsmateriale, uddannelser, e-learning, samarbejde med eksterne samarbejdspartnere o.l.

M.Sc. specialization in Indoor Environmental Engineering

I have developed several of these courses (convective flows (1 ECTS), design of energy efficient buildings, modeling and design of passive energy systems in buildings (2 ECTS) and modeling and design of natural and hybrid ventilation (1 ECTS)

M.Sc. specialization in Building Energy Design

I was one of two persons developing the curriculum for the M.Sc. specialization in Building Energy Design prior to its start in 2015 and later in the detailed planning of the education.

M.Sc. specialization in Architecture & Design

I have since the start of the M.Sc. specialization in Architecture & Design in 1997 been strongly involved in both planning and execution of this education. This involves especially development of teaching methods to integrate building technology, sustainable energy technologies and architectural aspects in an integrated design method for buildings.

PhD courses

At PhD level I have initiated a Ph.D. course (5 ECTS) on the subject "Modelling of natural and hybrid ventilation", which has been carried out in 2003 and 2005 with 17 students from 9 countries and 15 students from 8 countries, respectively. I have also had the responsibility of carrying out a PhD course (2ECTS) in "Energy saving of buildings in Europe", which was held at Tokyo Polytechnic University in June 2009.

Besides, I have in the last 10 years been course leader and lecturer at several continuing education courses arranged by the Danish Society for HVAC engineers (Danvak, Dansk Selskab for Varme- og Klimateknik), see list of courses below.

Collaboration with external partners

Several other universities world-wide have shown interest in the new teaching methods and the integrated design method for sustainable buildings, which have resulted in the development and participation in two EU ASIA Link projects: "A Multidisciplinary Approach to Curriculum Development in Sustainable Built Environment" and "Centre for Sino-European Sustainable Building Design and Construction" as well as one EU-Save project: "Master and Post Graduate education and training in multidisciplinary teams implementing EPBD and beyond" and one Horizon 2020 project "PROF TRAC PROFessional multi-disciplinary TRaining and Continuing development in skills for NZEB principles, see list of projects. The main purpose of the EU ASIA link projects has in cooperation with other European Universities (Cambridge and Brunel University, UK) to introduce new teaching methods and curriculums as well as upgrading of teachers at two Chinese and one Indian university. The main purpose of the EU-Save and the Horizon 2020 project is to create students and post graduate education and training courses for Integral Sustainable Energy Design of the Built Environment.

International Educational Projects

2005 – 2007 Co-manager and participant in EU ASIA Link project "A Multidisciplinary Approach to Curriculum Development in Sustainable Built Environment". Contract number: CN/ASIA-LINK/012 (93-520).

2005 – 2007 Participant in EU ASIA Link project "Centre for Sino-European Sustainable Building Design and Construction". Contract number: CN/ASIA-LINK/011 (91400).

2010-2013 Participant and work package leader in EU SAVE project "ISED-EDU Master and Post Graduate education and training in multidisciplinary teams implementing EPBD and beyond". Contract number: IEE 09/631/S12.558225.

2015-2018 Participant in EU Horizon 2020 project "PROF TRAC PROFessional multi-disciplinary TRaining and continuing development in skills for NZEB principles". Contract number: Grant Agreement number: 649473

6. Nominering til og/eller modtagelse af undervisningspriser.

7. Evt. personlige refleksioner og initiativer: Personlige overvejelser knyttet til undervisning og vejledning, ønsker til og planer for pædagogisk videreudvikling, planer for opfølgning på undervisningsevalueringer m.v.

8. Andet.